

Table S1. Summary of Mouse Models of Glioma

Genetics	Techniques	Tumor type	Grade	Incidences
NF1 ^{+/-} ;P53 ^{+/-} (Reilly et al., 2000)	gKO	AST	II-IV	30-75% by 15-55 wks
ARF ^{-/-} (Kamijo et al., 1997)	gKO	AST	NA	9% by 18-20 wks
P53 ^{fl/fl} (Wang et al., 2009)	cKO (GFAP-Cre)	AST/MED (13%)	NA	88% by 24-52 wks
NF1 ^{fl/+} ;p53 ^{+/-} (Zhu et al., 2005)	gKO,cKO (GFAP-Cre)	AST	II-IV	100% by 14-40 wks
NF1 ^{fl/+} ;p53 ^{-fl} (Zhu et al., 2005)	gKO,cKO (GFAP-Cre)	AST	II-IV	100% by 14-40 wks
NF1 ^{fl/+} ;p53 ^{+/-} ;Pten ^{fl/+} (Kwon et al., 2008)	gKO,cKO (GFAP-Cre)	AST	III-IV	100% by 12-24 wks
NF1 ^{fl/+} ;p53 ^{-fl} ;Pten ^{fl/+} (Kwon et al., 2008)	gKO,cKO (GFAP-Cre)	AST	III-IV	100% by 11-24 wks
NF1 ^{fl/+} ;p53 ^{fl/fl} ;Pten ^{fl/+} (Unpublished observation)	cKO (GFAP-Cre)	AST	III-IV	100% by 11-24 wks
NF1 ^{fl/+} ;p53 ^{fl/fl} ;Pten ^{fl/+} (Alcantara Llaguno et al., 2009)	cKO (Nes-CreERT2, E13.5 induce)	AST	III-IV	100% by 11-24 wks
NF1 ^{fl/+} ;p53 ^{fl/fl} ;Pten ^{fl/+} (Alcantara Llaguno et al., 2009)	cKO (Nes-CreERT2, induced at 4 wks)	AST	III-IV	100% by 28-56 wks
P53 ^{fl/fl} ;Pten ^{fl/+} (Zheng et al., 2008)	cKO (GFAP-Cre)	AST	III-IV	73% by 15-40 wks
GFAPZT121 (Xiao et al., 2002)	TG (bActin-Cre)	AST	II-III	100% by 25 wks
GFAPZT121;Pten ^{fl/+} (Xiao et al., 2002)	TG, cKO (bActin-Cre)	AST	II-III	100% by 11 wks
GFAPZT121;Pten ^{fl/fl} (Xiao et	TG; cKO; MSCV-Cre	AST	NA	100%

al., 2005)	virus			
GFAP-HRasV12 (Ding et al., 2001)	TG	AST	II-IV	20-100% by 2-24 wks
GFAP-HRasV12;GFAP-EGF RvIII (Ding et al., 2003)	TG	OLIG/MIXED	III	100% by 2-13 wks
GFAP-HRasV12;Ad-EGFRvII I (Wei et al., 2006)	TG; virus	AST/MIXED	II-IV	95% by 12 wks
GFAP-HRasV12;Pten ^{fl/+} (Wei et al., 2006)	TG; cKO, Ad-Cre virus	AST	III-IV	73% by 8 wks
S100-v-erbB (Weiss et al., 2003)	TG	OLIG	II	60% by 52 wk
S100-v-erbB;INK4aARF ^{-/-} (Weiss et al., 2003)	TG; cKO	OLIG	III	90% by 24 wks
S100-v-erbB;p53 ^{+/-} (Weiss et al., 2003)	TG, gKO	OLIG	III	80% by 24 wks
PDGF-B (Uhrbom et al., 1998)	MoMuL virus	AST/OLIG/PNET	NA	40% in 14-29 wks
PDGF-A (Jackson et al., 2006)	Infusion	NA	NA	100% in 6 days
PDGF-B;Ntv-a (Dai et al., 2001)	TG; RCAS virus	OLIG	Mainly II	60% by 12 wks
PDGF-B;Gtv-a (Dai et al., 2001)	TG; RCAS virus	OLIG	Mainly II	39% by 12 wks
PDGF-B;P53 ^{-/-} ;Ntv-a (Dai et al., 2001)	gKO, TG; RCAS virus	GBM	IV	100% by 8 wks
GFAP-PDGFB;P53 ^{-/-} (Dai et al., 2001)	TG gKO	GBM/OLIG	III-IV	43-68% by 24 wks
PDGF-B;INK4a/ARF ^{-/-} ;Ntv-a (Dai et al., 2001)	gKO, TG; RCAS virus	OLIG/MIXED/	Mainly III-IV	57% by 12 wks

		GBM		
PDGF-B;INK4a/ARF ^{-/-} ;Gtv-a (Dai et al., 2001)	gKO, TG; RCAS virus	OLIG/MIXED/ GBM	Mainly III-IV	70% by 12 wks
EGFRvIII;INK4a/ARF ^{-/-} ;NTV -a (Holland et al., 1998)	gKO, TG; RCAS virus	NA	NA	42% by 8-10 wks
EGFRvIII;INK4a/ARF ^{+/-} ;NTV -a (Holland et al., 1998)	gKO, TG; RCAS virus	NA	NA	52% by 8-10 wks
KRas;Akt;Ntv-a (Holland et al., 2000)	TG; RCAS virus	AST	IV	26% by 9 wks
KRas;Akt;INK4a/ARF ^{-/-} ;Ntv-a (Uhrbom et al., 2002)	gKO, TG; RCAS virus	AST	Mainly IV	49% by 12 wks
KRas;Akt;INK4a/ARF ^{-/-} ;Gtv-a (Uhrbom et al., 2002)	gKO, TG; RCAS virus	AST	Mainly IV	42% by 12 wks
HRasV12;AKT (Marumoto et al., 2009)	TG (GFAP-Cre); Lentivirus	AST	III-IV	42% by 16-20 wks
HRasV12;AKT;p53 ^{+/-} (Marumoto et al., 2009)	gKO, TG (GFAP-Cre); Lentivirus	AST	Mainly IV	100% by 22 wks
EGFRvIII/vIII;INK4a/ARF ^{-/-} ; Pten ^{fl/fl} (Zhu et al., 2009)	TG; cKO, gKO, Ad-Cre virus	GBM	IV	100% by 10 wks
EGFRvIII/wt;INK4a/ARF ^{-/-} ;Pt en ^{fl/fl} (Zhu et al., 2009)	TG; cKO, gKO, Ad-Cre virus	GBM	IV	100% by 13 wks
P53 ^{fl/fl} ;Pten ^{fl/fl} (Chow et al., 2011)	TG;cKO,GFAP-CreER TM	AST	III-IV	100% by ~52 wks
P53 ^{fl/fl} ;Pten ^{fl/fl} ;Rb ^{fl/fl} (Chow et al., 2011)	TG;cKO,GFAP-CreER TM	AST	III-IV	100% by ~30 wks
NF ^{fl/-} or NF1 ^{fl/fl} (Bajenaru et al., 2003; Zhu et al., 2005)	TG (GFAP-cre)	AST	I	100% or 62% by ~ 40 wks

gKO: germline knockout; cKO: conditional knockout; TG: transgenic animal; Ad-Cre: Cre expressing adenovirus

OLIG: oligodendroglioma; AST: astrocytoma; GBM: glioblastoma; MED: medulloblastoma; MIXED: oligodendroastrocytoma

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